FURTHER NOTES ON THE GENUS EREMOLEON BANKS, WITH A NEW SPECIES (NEUROPTERA: MYRMELEONTIDAE)¹

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The material described below was not seen by the writer in time for inclusion in the list of species of *Eremoleon* given in a previous paper (Psyche 63: 82-108, 1957).

Eremoleon cerverinus (Navas) new comb. Figure 1 a, b, c

Belen cerverinus Navas, 1921, Broteria 19:119 (Genotype Belen Navas 1921).

A small species, somewhat like *E. macer* in appearance. Antennal segments all broader than long. Vertex and pronotum as in fig. 1a. Setae on head and thorax all white, on legs, mostly black. Apical segment of fore tarsus approximately as long as four preceding segments, cylindrical, with ventral setae evenly spaced. Mesepimeral wing process light brown.

Abdominal tergite 2 dark, 3-7 pale basally, apical halves black. Paramere plates rhomboidal, sculptured area not extending over entire surface of plate (fig. 1b).

Wings slender. Fore wing with 9-11 veinlets from $PCu+A_1$ to hind margin; in holotype 4-5, prestigmatic costal veinlets connected. Cubital field of hind wing with three rows of cells. Venation mostly pale, many cross veins dark; small brown spots at rhegma and base of stigma.

Measurements (mm.): fore wing 24. long, 6.2 wide; hing wing 23. (δ) — 23.5 (type) long, 5.0 wide; antennae 4.2 (type); 3rd abdominal tergite 3.0 (δ).

The holotype (No. 15125) and a & from Rio Almendares, Habana, Cuba, Cervera col., are in the Museum of

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Comparative Zoology. To the type has been affixed a 9

abdomen from a specimen of another species.

E. macer may be differentiated from cerverinus by its more slender labial palpi, and by its having a swelling, bearing a dense brush of setae, on the ventral side of the apical tarsomere. E. pallens has no distinct vertex markings, has black setae on the pronotum, and four rows of cells in the cubital area of the hind wing.

The character upon which Navas based his genus *Belen*, anastomosis of several prestignatic cross veins, is present in the holotype, but not in the male. There being no other character of generic significance separating *cerverinus* from the other species of *Eremoleon*, *Belen* must be con-

sidered a synonym of that genus.

Eremoleon sectoralis, new species Figure 1 d. e

Lower face and mouthparts pale, frons and vertex fuscous. Vertex scars brown-suffused; pattern like that of cerverinus (fig. 1a), but two lateral spots of second vertex row are fused. Scape shiny brown, pedicel brown above. Palpi (fig. 1e) slender. Thorax brown-fumose above, pale yellow below, no distinct macular pattern. Mesepimeral wing process honey-yellow. Legs pale, brown-dotted at setal bases; brown bands at apex of femur, near base and at apex of tibia, and at tip of last tarsomere. Fore tibial spurs equal $3\frac{1}{2}$ tarsomeres in length, hind spurs, $2\frac{1}{2}$ tarsomeres. Apical segment of fore tarsus cylindrical, length 0.37 times that of entire tarsus. Abdomen brown-fuscous, without distinct markings; 2nd and base of 3rd sternite, and segments 7-10, pale.

Setae mostly dark, except some pale on frons, clypeus, cervical sclerites, meso- and metapleurae, base of fore coxa, and 2nd and 3rd abdominal sternites. Pronotal setae shorter than those of *cerverinus*, and more numerous behind furrow. Setae on apex of 9th abdominal tergite, and posteroventral portion of 10th, short (less than 0.14 mm. long), black, stout, decumbent; tips flattened, expanded, blunt.

Wings (fig. 1d). Basal costal veinlets widely spaced; cross veins absent from first few branches of Rs. Venation

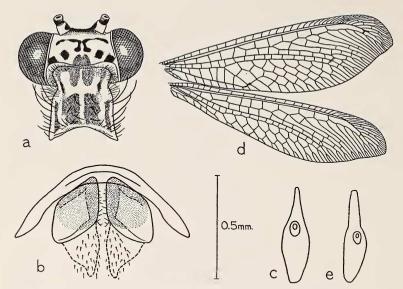


Fig. 1. Eremoleon cerverinus (Navas): a—vertex and pronotum, b—gonarcus and parameres, c—last segment, labial palpus. E. sectoralis n. sp.: d—wings, e—last segment, labial palpus. Scale for figs. b, c, e only.

mostly brown, some pale streaks along main veins of fore wing and C, Sc and R in hind wing. Faint brown spots at stigma, apex of hypostigmatic cell, rhegma, and end of CuA₂ in fore wing, at rhegma in hind wing.

Measurements (mm.): body length, 22.; abdomen 16.5; fore wing length 23.; pterothorax 3.9; 3rd abdominal tergite 3.6.

Holoytpe 9:5 mi. S. San Miguel, L. Calif., 20-VII-38, Michelbacher and Ross, in the California Academy of Sciences. This specimen is a paratype of *E. affine* Banks (= $E.\ nigribasis$ Banks).

The wing shape and lack of cross veins between the first few branches of Rs are characteristic of this species. Sectoralis resembles E. pallens Banks, which differs in having broader, pointed wings, with 4 rows of cells in cubital field of hind wing, pale pedicel and scape, no dark dots on legs, and long (up to 0.36 mm.), pointed, straight setae on 9th abdominal tergite of φ .